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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,768	07/10/2003	Steven A. Zettel	101AC-045	2283

7590 10/21/2004
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EXAMINER


NGUYEN, CHAU N

ART UNIT	PAPER NUMBER
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2831

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/616,768	Applicant(s) ZETTEL ET AL.	
	Examiner Chau N Nguyen	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 16-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7,9,11,13 and 15 is/are rejected.
- 7) ☒ Claim(s) 4,8,10,12 and 14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-15 in the reply filed on Aug. 10th 2004 is acknowledged. The traversal is on the ground(s) that Group I as now amended, requires the element being formed by compression, and the method of Group II also requires "compression". This is not found persuasive because it has been held that during examination, the patentability of a product claim is determined by the novelty and nonobviousness of the claimed product itself without consideration of the process for making it which is recited in the claim. In re Thorpe, 227 USPQ 964. Although claim 1 is amended to include the element being made by pressing the combined meshes, the method limitation, made by pressing, is not considered when the novelty and non-obviousness of the claimed product is determined.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. Color photographs and color drawings are acceptable only for examination purposes unless a petition filed under 37 CFR 1.84(a)(2) is granted permitting their

use as acceptable drawings. In the event that applicant wishes to use the drawings currently on file as acceptable drawings, a petition must be filed for acceptance of the color photographs or color drawings as acceptable drawings. Any such petition must be accompanied by the appropriate fee set forth in 37 CFR 1.17(h), three sets of color drawings or color photographs, as appropriate, and, unless already present, an amendment to include the following language as the first paragraph of the brief description of the drawings section of the specification:

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Color photographs will be accepted if the conditions for accepting color drawings have been satisfied.

3. The drawings are objected to because they do not clearly show the claimed subject matter. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the

several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 3, 7, 8 and 10 are objected to because of the following informalities:

in claim 3, lines 1-3, the recitation of "the soft wire being at least as heat resistant as type 309 stainless steel" is vague and indefinite since it is unclear to whether "309 stainless steel" is part of the claimed invention.

in claim 7, line 1, "the ring" lacks antecedent basis,

in claim 8, line 1, "the ring is has" is unclear and lacks antecedent basis,

in claim 10, line 1, "the monolith" lacks antecedent basis,

in claim 10, lines 2-3, "one wire mesh element" is unclear to how this mesh element relates to the mesh element recited in claim 9. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-3, 5-7, 9, 11, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jaraczewski et al. (4,817,613) in view of Weil (5,617,900).

Jaraczewski et al. discloses a knitted wire mesh element (Figure 2) comprising a combination of two wire meshes (12,14). Noted that the two meshes are in direct contact. Jaraczewski et al. does not disclose the mesh element comprising an annealed soft wire mesh and a hard wire mesh, wherein the soft wire mesh is present on the outer surface of the element. Weil discloses a mesh element comprising an inner mesh (20) and an outer mesh (40), wherein the inner mesh is a hard wire mesh and the outer mesh is an annealed soft wire mesh (col. 3, lines 48-51 and lines 64-67). It would have been obvious to one skilled in the art to use soft wire mesh for the outer mesh (14) and to use hard wire mesh for the inner mesh (12) of Jaraczewski et al. to provide the mesh element with pliability, strength and corrosion resistance.

The modified mesh element of Jaraczewski et al. also discloses the soft wire being flat (see Jaraczewski et al., col. 4, lines 55-56) (re claims 2, 11), the soft wire being a heat resistant (re claim 3), the element having an elliptical geometry (re claim 6), and a ring (54, see Jaraczewski et al.) having a flange at one edge (re claim 7). Re claims 5, 13 and 15, it would have been obvious to one skilled in the art to use precipitation-hardened stainless steel for the hard wire in the modified mesh element of Jaraczewski et al. since precipitation-hardened stainless steel is known in the art for its corrosion resistance properties. Re claim 9, it would have

been obvious to one skilled in the art to use the modified mesh element of Jaraczewski et al. in a catalytic converter assembly since the mesh element of Jaraczewski et al. provides both resilience and strength. In addition, it has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Allowable Subject Matter

8. Claims 4, 8, 10, 12 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not teach or suggest a mesh element comprising all the features as recited in the claims and in combination with the soft wire having an oxide coating on its surface (re claim 4), the ring having multiple

mesh layers (re claim 8), the converter assembly further comprising a monolith which is elliptical, rectilinear or a combination thereof in cross-section and said wire mesh element is disposed at each end thereof (re claim 10).

Cited Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rider, Candee et al. and Webster, Jr. disclose mesh elements comprising two wire meshes.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chau N Nguyen
Primary Examiner
Art Unit 2831